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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,236	07/22/2003	Thomas H. Rooney JR.	H1535-00019	7544
41396	7590 01/12/2006		EXAM	INER
DUANE MC	RRIS LLP		BLAKE, CA	ROLYN T
IP DEPARTM			ART UNIT	PAPER NUMBER
30 SOUTH 17TH STREET			ARTUNII	PAPER NUMBER
PHILADELPI	HIA, PA 19103-4196		3724	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)
		10/624,236 ROONEY, THOMAS H.	
Office Action Summary		Examiner	Art Unit
		Carolyn T. Blake	3724
Period f	The MAILING DATE of this communication ap for Reply	pears on the cover sheet w	vith the correspondence address
WHI - Exte afte - If N - Fail Any	HORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D ensions of time may be available under the provisions of 37 CFR 1. or SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period lure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MO e, cause the application to become A	ICATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status			
1)[	Responsive to communication(s) filed on 20 C	October 2005.	
	•	s action is non-final.	
3)	<i>,</i> —		tters, prosecution as to the merits is
.—	closed in accordance with the practice under	•	
Disposi	tion of Claims		
4)⊠	Claim(s) 1-8 and 10-21 is/are pending in the a	application.	
٠,؎	4a) Of the above claim(s) is/are withdra		
5)	Claim(s) is/are allowed.		
6)⊠	Claim(s) 1-8 and 10-21 is/are rejected.		
7)	Claim(s) is/are objected to.		
8)	Claim(s) are subject to restriction and/o	or election requirement.	
Applica	tion Papers		
9)[]	The specification is objected to by the Examino	er.	
, —	The drawing(s) filed on 22 July 2003 is/are: a)		cted to by the Examiner.
,	Applicant may not request that any objection to the		
	Replacement drawing sheet(s) including the correct		
11)	The oath or declaration is objected to by the E	xaminer. Note the attache	ed Office Action or form PTO-152.
?riority	under 35 U.S.C. § 119		
	Acknowledgment is made of a claim for foreigr )  All b)  Some * c)  None of:	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).
a,	1.☐ Certified copies of the priority documen	ts have been received	
	2. Certified copies of the priority document		Application No.
	3. Copies of the certified copies of the prior		
	application from the International Burea		
		,	

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date \_\_\_

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Attachment(s)

4) Interview Summary (PTO-413)

6) Other: \_\_\_\_\_.

Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

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#### **DETAILED ACTION**

- 1. This action is in response to applicant's amendment received on October 20, 2005.
- 2. The text of those sections in Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 103

3. Claims 1-8, 10, 11, and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vecchi (3,742,797) in view of Svensson (3,111,053).

Regarding claims 1, 8, and 10, Vecchi discloses a metal stamping system (FIGS 1-4) comprising: a press including; an upper die shoe (8) including a plurality of guide posts (10) arranged in a pattern and projecting outwardly from a bottom surface, a lower die shoe (1) positioned in confronting relation to said surface and including a first plurality of open ended tubular guide bushings (27) each having a first anti-friction bearing assembly (24, 25, and 28) positioned within a central passageway, and each located so as to receive a corresponding one of said guide posts (10); and a stripperplate (13) positioned between said upper die shoe (8) and said lower die shoe (1), including a second plurality of open-ended tubular guide bushings (20) each having an outer surface and an inner surface and each projecting outwardly toward said lower die shoe (1) in a pattern corresponding to said pattern of guide posts (10) such that each of said first anti-friction bearing assemblies (24, 25, and 28) slidingly engages an outer surface of a corresponding one of said second open ended guide bushing (20) wherein each of said second plurality of open-ended guide bushings (20) includes a second anti-

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friction bearing assembly (see FIG 4) positioned on said inner surface so as to engage a corresponding one of said guide posts (10); and spring means (18) for separating said upper shoe (8) from said lower shoe (1) after each downward stroke. However, Vecchi fails to disclose the means for actuating the stamping system, including a ram with a bulbous protrusion. Svensson discloses a actuation system comprising a ram (14/15) having a bulbous protrusion (19) projecting outwardly from an end; an upper element (12/16/18/20) including (i) a recess (18) integrally formed therein in a top surface, said recess (18) being complementary to and receiving said bulbous protrusion (19), and (ii) a plurality of guide posts (unnumbered, see FIG 4) arranged in a pattern and projecting outwardly from a bottom surface, wherein said bulbous protrusion (19) is received within said complementary recess (18). Note: The recess (18) and die shoe top surface can be considered "integral" because they are secured together as a single unit. This configuration creates particularly good contact between the corresponding surfaces, resulting in decreased wear and freedom of angular and transverse movement (col. 2, lines 37-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an actuation system including a ram with a bulbous protrusions, as taught by Svensson, on the Vecchi device for the purpose of decreasing wear and creating angular and transverse freedom of movement.

Regarding claims 2, 3, and 15, Vecchi discloses each of said open-ended tubular guide bushings (20) includes an annular shoulder that projects radially outwardly from a top end. See FIG 3. Furthermore, Vecchi discloses each of said open-ended tubular guide bushings (20) comprises an internal passageway defined by a hardened surface

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and sized to slidingly accept one of said first anti-friction bearing assemblies (24, 25, and 28).

Regarding claims 4, 6, 17, and 20, Vecchi discloses each of said anti-friction bearing assemblies (24, 25, and 28) includes a plurality of circularly and longitudinally spaced ball bearings (25) that are each confined in a bearing cage (24), wherein said ball bearings (25) are preloaded against said hardened surface.

Regarding claims 5 and 7, Vecchi discloses each of said anti-fiction bearing assemblies (24, 25, and 28) comprises an open ended tubular cylinder (28).

Regarding claim 11, Vecchi discloses the upper die shoe (8) includes at least two of said guide posts (10) that are each received within one of said first open ended tubular guide bushings (27).

Regarding claim 14, Vecchi discloses the stripper-plate (13) includes a pattern of peripheral through-bores (FIG 1) arranged in corresponding relation to the positions of said guide posts (10) and said first plurality of open ended tubular guide bushings (27).

Regarding claim 16, Vecchi discloses each of said internal passageways is defined by a hardened surface, and is sized to slidingly receive a first anti-friction bearing assembly (24, 25, and 28) and one of said guide posts (10).

Regarding claim 18, Vecchi discloses the bearing cage (24) is cylindrical, and sized so as to longitudinally enclose and encircle one of said guide posts (10).

Regarding claim 19, Vecchi discloses each of said first anti-friction bearing assemblies (24, 25, and 28) is located between said guide post (10) and bearing cage

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(24) so as to allow for a prestressed loading of said ball bearings (25) against an outer surface of said guide post (10).

Regarding claim 21, Vecchi discloses each of said bearing cages (24) is cylindrical, and each is sized so as to (i) longitudinally enclose and encircle one of said second plurality of open-ended tubular guide bushings (20), and (ii) be received within one of said first plurality of open-ended tubular guide bushings (27).

- 4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vecchi in view of Svensson as applied to claim 10 above, and further in view of Beck (1,968,595). Vecchi discloses the upper die shoe (8) includes four guide posts (10) wherein each is received within one of the first open ended tubular guide bushings (27). Vecchi in view of Svensson fails to disclose six guideposts. However, Beck discloses a metal stamping system comprising a press with an upper die shoe (4), a lower die shoe (1), and a stripper plate (48). The upper die shoe includes six guide posts (3). See FIG 3. The additional guide posts provide greater precision of the stamping system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide six guide posts, as disclosed by Beck, on the Vecchi and Svensson combination in order to provide greater precision while stamping.
- 5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vecchi in view of Svensson as applied to claim 10 above, and further in view of Janiszewski (4,003,283). Vecchi discloses a spring means (18) for separating the upper shoe (8) from the lower shoe (1), but fails to disclose the spring is mounted to the guide post. Janiszewski discloses a stamping system with an upper die shoe (10) and a lower die

shoe (14) wherein the guide post (10) includes a recess defined at a free end (bottom of 10), having a spring (72) mounted therein for separating said upper shoe (10) from said lower shoe (14) after each downward stroke. This arrangement with the bearing balls provides uniform guided movement of the guide post (col. 1, lines 22-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a spring on the free end of the guide post, as disclosed by Janiszewski, on the Vecchi and Svensson device in order to provide uniform guided movement of the guide post.

#### Response to Arguments

6. Applicant's arguments with respect to claims 1-8 and 10-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues the Vecchi-Svensson combination does not teach an upper die shoe with a recess integrally formed as claimed. While the upper die shoe and the recess comprise separate parts, these parts are secured together as a single unit. The constituent parts are so combined as to constitute a unitary whole. Webster's New International Dictionary (Second Edition) defines "integral" as "(2) composed of constituent parts making a whole; composite; integrated." In re Larson, 144 USPQ 347 (CCPA 1965)

## Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T. Blake whose telephone number is (571) 272-4503. The examiner can normally be reached on Monday to Friday, 8:00 AM to 5:30 PM, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CB

January 5, 2006

Allan N. Shoap Supervisory Patent Examiner Group 3700